

# Gene filter for polyps

| 1  | 2             | 3  | 4  | 5  | 6  | 7      | 8   | 9   | 10     | 11 | 12 | 13 |
|--|---------------|----|----|----|----|--------|-----|-----|--------|----|----|----|
| Description  | Accession     | L1 | L2 | L3 | L4 | LC1    | LC2 | LC3 | LC4    | U1 | U2 | U3 |
| Genes present in at least 4 'normal' tissues, two each upper and lower intestine, absent in polyps                   |               |    |    |    |    |        |     |     |        |    |    |    |
| EST: mz95f11.r1 Soares mouse lymph node NbMLN Mus musculus cDNA clone 721197 5', mRNA sequence. (from Genbank)       | aa266897_at   | A  | A  | A  | A  | 538 P  |     | A   | 838 P  | A  | A  | A  |
| EST: mz46g09.r1 Barstead mouse pooled organs MPLRB4 Mus musculus cDNA clone 716512 5', mRNA sequence. (from Genbank) | aa265119_s_at | A  | A  | A  | A  | 523 P  |     | A   | 850 P  | A  | A  | A  |
| M. musculus gene for insulin-like growth factor binding protein-1  | X67493_g_at   | A  | A  | A  | A  | 914 P  |     | A   | 508 P  | A  | A  | A  |
| Caspase 7  | u67321_s_at   | A  | A  | A  | A  | 1021 P |     | A   | 457 P  | A  | A  | A  |
| Purkinje cell protein 4  | X17320_s_at   | A  | A  | A  | A  | 767 P  |     | A   | 439 P  | A  | A  | A  |
| EST: ms95a05.r1 Soares mouse 3NbMS Mus musculus cDNA clone 619280 5', mRNA sequence. (from Genbank)                  | aa175794_s_at | A  | A  | A  | A  | 686 P  |     | A   | 669 P  | A  | A  | A  |
| No info for gene   | ET63085_f_at  | A  | A  | A  | A  | 4575 P |     | A   | 2117 P | A  | A  | A  |
| Genes present in at least 4 'polyp' tissues, two each upper and lower intestine, absent in 'normal'                  |               |    |    |    |    |        |     |     |        |    |    |    |

Figure 1A

Table 1B

| 1  | 2                | 3  | 4  | 5  | 6  | 7   | 8   | 9   | 10  | 11 | 12 | 13 |
|--|------------------|----|----|----|----|-----|-----|-----|-----|----|----|----|
| Description  | Accession        | L1 | L2 | L3 | L4 | LC1 | LC2 | LC3 | LC4 | U1 | U2 | U3 |
| EST: mz97g06.r1 Soares mouse lymph node NbMLN Mus musculus cDNA clone 721402 5', mRNA sequence. (from Genbank) | AA267281_i_at    |    |    |    |    |     |     |     |     |    |    |    |
| Sim. to TRANSLATION INITIATION FACTOR EIF-2B-EPSILON SUBUNIT   | Msa.8133.0_s_at  |    |    |    |    |     |     |     |     |    |    |    |
| Fibroblast growth factor Inducible 16  | U42385_s_at      |    |    |    |    |     |     |     |     |    |    |    |
| Sim. to GLYCOGEN PHOSPHORYLASE, BRAIN FORM (EC 2.4.1.1)  | Msa.6220.0_s_at  |    |    |    |    |     |     |     |     |    |    |    |
| Mus musculus TRAF family member associated NF-kappa B activator (TANK) mRNA                                    | u51907_s_at      |    |    |    |    |     |     |     |     |    |    |    |
| EST: Mus musculus 3.5-dpc blastocyst cDNA 3'-end sequence, mRNA  | C79015_rc_at     |    |    |    |    |     |     |     |     |    |    |    |
| Sim. to PROHIBITIN (B-CELL RECEPTOR ASSOCIATED PROTEIN 32) (BAP 32)  | Msa.24245.0_f_at |    |    |    |    |     |     |     |     |    |    |    |
| EST: vb41d02.r1 Soares mouse lymph node NbMLN Mus musculus cDNA clone 751491 5', mRNA sequence. (from Genbank) | AA396006_at      |    |    |    |    |     |     |     |     |    |    |    |
| Mus musculus Cdk4 and Cdk6 inhibitor p19 protein mRNA  | u20497_s_at      |    |    |    |    |     |     |     |     |    |    |    |
| EST: Mus musculus 3.5-dpc blastocyst cDNA 3'-end sequence, mRNA  | c77069_rc_s_at   |    |    |    |    |     |     |     |     |    |    |    |
|  |                  |    |    |    |    |     |     |     |     |    |    |    |

Figure 1B

FIGURE 1C

| 1   | 2             | 3      | 4      | 5        | 6     | 7   | 8   | 9   | 10  | 11 | 12 | 13 |
|---|---------------|--------|--------|----------|-------|-----|-----|-----|-----|----|----|----|
| Description   | Accession     | I1     | I2     | I3       | I4    | LC1 | LC2 | LC3 | LC4 | U1 | U2 | U3 |
| Mus musculus CDK-activating kinase assembly factor p36/MAT1                             | U35249_s_at   | 709 P  |        | A 1809 P | A     |     |     |     |     |    |    |    |
| EST: mo35b11.r1 Life Tech mouse embryo 13 5dpc  |               |        |        |          |       |     |     |     |     |    |    |    |
| 10666014 Mus musculus cDNA clone 555549 5', mRNA sequence. (from Genbank)               | aa111610_s_at | 805 P  | 909 P  | A        | A     |     |     |     |     |    |    |    |
| EST: Mus musculus 3.5-dpc blastocyst cDNA 3'-end sequence, mRNA                         |               |        |        |          |       |     |     |     |     |    |    |    |
| sequence. (from Genbank)  | C81595_rc_at  | 1202 P | 2162 P | A        | A     |     |     |     |     |    |    |    |
| Myosin Ic   | aa285769_s_at | 5657 P | 4780 P | A        | A     |     |     |     |     |    |    |    |
| EST: Mus musculus 3.5-dpc blastocyst cDNA 3'-end sequence, similar to R. norvegicus DNA |               |        |        |          |       |     |     |     |     |    |    |    |
| sequence for LFB1/HNF1 promoter, mRNA sequence. (from Genbank)                          | C79518_rc_at  | 1111 P | 178 P  | A        | 213 P |     |     |     |     |    |    |    |
| Mouse E46 mRNA for E46 protein::BRAIN PROTEIN E46                                       | X61506_f_at   | A      | A      | 143 P    | 280 P |     |     |     |     |    |    |    |
| EST: M. musculus expressed sequence tag M1EST707, mRNA sequence. (from Genbank)         | Z31269_s_at   | 359 P  | A      | 282 P    | A     |     |     |     |     |    |    |    |

Figure 1C

FIGURE 1D

| 1   | 2                   | 3      | 4      | 5      | 6      | 7   | 8   | 9   | 10  | 11     | 12     | 13  |
|---|---------------------|--------|--------|--------|--------|-----|-----|-----|-----|--------|--------|-----|
| Description   | Accession           | L1     | L2     | L3     | L4     | LC1 | LC2 | LC3 | LC4 | U1     | U2     | U3  |
| Sim. to ENDOSOMAL P24A<br>PROTEIN PRECURSOR (70 KD<br>ENDOMEMBRANE PROTEIN)<br>(PHEROMONE ALPHA-<br>FACTOR TRANSPORTER)<br>(ACIDIC 24 KD LATE<br>ENDOCYTIC INTERMEDIATE<br>COMPONENT) | Msa.24715.0<br>s_at | A      | A      | 563 P  | 420 P  |     | A   | A   | A   | 529 P  | A      | 129 |
| Mus musculus mCPE-R<br>mRNA for CPE-receptor  | AB000713_g_<br>at   | 519 P  | 746 P  | A      | A      |     |     |     |     |        |        |     |
| Mus musculus cdc2/CDC28-<br>like protein kinase 3 (Cdk3)<br>mRNA  | AF033565_at         | A      | 1058 P | 372 P  | 753 P  |     | A   | A   | A   | 903 P  | 763 P  |     |
| Small inducible cytokine<br>A12   | u50712_s_at         | 648 P  | 957 P  | A      | A      |     | A   | A   | A   | 705 P  | 1281 P | 480 |
| Mus musculus protein-<br>tyrosine phosphatase mRNA<br>EST: mr11h07.r1 Soares<br>mouse 3NbMS Mus<br>musculus cDNA clone<br>597181 5', mRNA sequence.<br>(from Genbank)                 | AF013490_s_<br>at   | 921 P  | 1150 P | A      | A      |     | A   | A   | A   | A      | 1371 P | 642 |
| EST: mu22e08.r1 Soares<br>2NbMT Mus musculus cDNA<br>clone 640166 5', mRNA<br>sequence. (from Genbank)  | aa145148_s_<br>at   | 1353 P | 1346 P | A      | A      |     | A   | A   | A   | 1044 P | 1530 P | 659 |
|   | aa197627_s_<br>at   | 567 P  | 2040 P | A      | 1336 P |     |     |     |     |        |        |     |
| Laminin, beta 3   | U43298_s_at         | 1151 P | 1698 P | 1636 P | A      |     |     |     |     |        |        |     |
| Most cell protease 1  | X68803_s_at         | A      | A      | 2781 P | 2051 P |     | A   | A   | A   | 1858 P | 1612 P | 227 |
|   |                     |        |        |        |        |     | A   | A   | A   |        | A      | 629 |

Figure 1D



## Figure 1E

## Figure 1E

## Figure 1. F

FIGURE 1

| 1  | 2                 | 3  | 4  | 5  | 6  | 7   | 8   | 9   | 10  | 11 | 12 | 13 |
|--|-------------------|----|----|----|----|-----|-----|-----|-----|----|----|----|
| Description  | Accession         | U1 | U2 | U3 | U4 | LC1 | LC2 | LC3 | LC4 | U1 | U2 | U3 |
| EST: mv22d10.r1<br>GuayWoodford Beiler mouse<br>kidney day 0 Mus musculus<br>cDNA clone 655795 5',<br>mRNA sequence. (from<br>Genbank) | aa239576_s_<br>at |    |    |    |    |     |     |     |     |    |    |    |
| EST: mt81b04.r1 Soares<br>mouse lymph node NbMLN<br>Mus musculus cDNA clone<br>636271 5', mRNA sequence.<br>(from Genbank)             | aa189313_s_<br>at |    |    |    |    |     |     |     |     |    |    |    |
| EST: vq81h09.s1 Knowles<br>Solter mouse 2 cell Mus<br>musculus cDNA clone<br>1108769 5', mRNA<br>sequence. (from Genbank)              | aa647562_g<br>at  |    |    |    |    |     |     |     |     |    |    |    |
| Mus musculus alpha 1 type<br>I collagen gene, partial cds<br>and 3' flanking<br>region::Procollagen, type I,<br>alpha 1                | u08020_f at       |    |    |    |    |     |     |     |     |    |    |    |
| Mouse mRNA for eptregulin<br>IMMEDIATE EARLY PROTEIN<br>GLY96  | D30782_s at       |    |    |    |    |     |     |     |     |    |    |    |
| EST: mr31f05.r1 Soares<br>mouse 3NbMS Mus<br>musculus cDNA clone<br>599073 5', mRNA sequence.<br>(from Genbank)                        | aa172851_s_<br>at |    |    |    |    |     |     |     |     |    |    |    |

Figure 1 G

| 14 | 15     | 16     | 17     | 18     | 19                  | 20                | 21                      | 22                    | 23             |
|----|--------|--------|--------|--------|---------------------|-------------------|-------------------------|-----------------------|----------------|
| U4 | UC1    | UC2    | UC3    | UC4    | Average Lower Colon | stdev Lower Colon | Average Small Intestine | stdev Small Intestine | Average Polyps |
| A  | 1060 P | A      | 447 P  | A      | 688                 | 212.1320344       | 753.5                   | 433.4564569           |                |
| A  | 539 P  | A      | 447 P  | 964 P  | 686.5               | 231.2239174       | 650                     | 275.7952139           |                |
| A  | A      | A      | 443 P  | 699 P  | 862.3333333         | 331.5333065       | 571                     | 181.019336            |                |
| A  | 1536 P | 1741 P | 1883 P | 957 P  | 739                 | 398.8082246       | 1529.25                 | 407.2234235           |                |
| A  | 503 P  | 550 P  | 262 P  | 296 P  | 593.3333333         | 164.8524593       | 402.75                  | 144.8433061           |                |
| A  | 756 P  | 902 P  | 370 P  | 446 P  | 745.6666667         | 118.373702        | 618.5                   | 252.1818127           |                |
| A  | 1780 P | 1400 P | A      | 3096 P | 4249.25             | 2818.113361       | 2092                    | 890.0067415           |                |
|    |        |        |        |        |                     |                   |                         |                       |                |

Figure 1 H



Figure 1 I

| 14      | 15  | 16  | 17  | 18  | 19                  | 20                | 21                      | 22                    | 23             |
|---------|-----|-----|-----|-----|---------------------|-------------------|-------------------------|-----------------------|----------------|
| UA      | UC1 | UC2 | UC3 | UC4 | Average Lower Colon | stdev Lower Colon | Average Small Intestine | stdev Small Intestine | Average Polyps |
| P 104 P | A   | A   | A   | A   | 180.5               | 60.1040764        | 120.5                   | 23.33452378           | 150.5          |
| A 289 P | A   | A   | A   | A   | 321.5               | 159.0990258       | 303.5                   | 20.50609665           | 312.5          |
| A 330 P | A   | A   | A   | A   | 373                 | 90.50966799       | 272                     | 82.02438662           | 322.5          |
| A       | A   | A   | A   | A   | 456                 | 272.9432175       | 271                     | 67.88225099           | 363.5          |
| P 390 P | A   | A   | A   | A   | 433.5               | 53.03300859       | 309                     | 114.5512986           | 371.25         |
| P A     | A   | A   | A   | A   | 414.5               | 79.90306627       | 366                     | 253.1442277           | 390.25         |
| P A     | A   | A   | A   | A   | 777.5               | 120.9152596       | 530.5                   | 183.1406563           | 654            |
| A 542 P | A   | A   | A   | A   | 780                 | 677.4082964       | 582.5                   | 57.27564928           | 681.25         |
| A A     | A   | A   | A   | A   | 810.5               | 283.5498193       | 619.5                   | 9.192388155           | 715            |
| P 759 P | A   | A   | A   | A   | 1149                | 852.7707781       | 548.5                   | 297.6919549           | 848.75         |

Figure 1 I

| 14       | 15  | 16  | 17  | 18  | 19                     | 20                | 21                      | 22                    | 23             |
|----------|-----|-----|-----|-----|------------------------|-------------------|-------------------------|-----------------------|----------------|
| U4       | UC1 | UC2 | UC3 | UC4 | Average Lower<br>Colon | stdev Lower Colon | Average Small Intestine | stdev Small Intestine | Average Polyps |
| P 576 P  | A   | A   | A   | A   | 1259                   | 777.8174593       | 554                     | 31.11269837           | 906.5          |
| A A      | A   | A   | A   | A   | 857                    | 73.53910524       | 1145                    | 236.1736649           | 1001           |
| A A      | A   | A   | A   | A   | 1682                   | 678.8225099       | 1932.5                  | 1174.504364           | 1807.25        |
| A 2339 P | A   | A   | A   | A   | 5218.5                 | 620.1326471       | 2819                    | 678.8225099           | 4018.75        |
| P        | A   | A   | A   | A   | 167.3333333            | 51.82984983       | 89.5                    | 43.13351365           | 136.2          |
| P 195 P  | A   | A   | A   | A   | 211.5                  | 96.87362902       | 175.6666667             | 89.57864329           | 190            |
| P 490 P  | A   | A   | A   | A   | 320.5                  | 54.44722215       | 397.3333333             | 105.8363517           | 366.6          |

Figure 1 J

| 14       | 15  | 16  | 17  | 18  | 19                  | 20                | 21                      | 22                    | 23             |
|----------|-----|-----|-----|-----|---------------------|-------------------|-------------------------|-----------------------|----------------|
| U4       | UC1 | UC2 | UC3 | UC4 | Average Lower Colon | stdev Lower Colon | Average Small Intestine | stdev Small Intestine | Average Polyps |
| P 595 P  | A   | A   | A   | A   | 491.5               | 101.1162697       | 417.6666667             | 252.161324            | 447.2          |
| P 663 P  | A   | A   | A   | A   | 632.5               | 160.5132393       | 617                     | 217.2487054           | 623.2          |
| A        | A   | A   | A   | A   | 727.6666667         | 343.7009359       | 833                     | 98.99494937           | 769.8          |
| P        | A   | A   | A   | A   | 802.5               | 218.4959954       | 822                     | 413.118627            | 814.2          |
| P 1084 P | A   | A   | A   | A   | 1035.5              | 161.9274529       | 1032.333333             | 367.236073            | 1033.6         |
| P        | A   | A   | A   | A   | 1349.5              | 4.949747468       | 1077.666667             | 436.4748943           | 1186.4         |
| P 1123 P | A   | A   | A   | A   | 1314.333333         | 736.7389859       | 1023.5                  | 140.7142495           | 1198           |
| P        | A   | A   | A   | A   | 1495                | 299.5212847       | 919.5                   | 979.3428919           | 1264.8         |
| P 726 P  | A   | A   | A   | A   | 2416                | 516.1879503       | 1071                    | 683.2854455           | 1609           |

Figure 1, K

|          | 14  | 15  | 16  | 17  | 18  | 19                  | 20                | 21                      | 22                    | 23             |
|----------|-----|-----|-----|-----|-----|---------------------|-------------------|-------------------------|-----------------------|----------------|
| U4       | UC1 | UC2 | UC3 | UC4 |     | Average Lower Colon | stdev Lower Colon | Average Small Intestine | stdev Small Intestine | Average Polyps |
| P 2714 P | A   | A   | A   | A   | A 5 | 1966.5              | 760.1397898       | 1761.333333             | 883.1224906           | 1843.4         |
| P 3719 P | A   | A   | A   | A   | A 5 | 3350                | 69.29646456       | 1780.333333             | 193.8874244           | 2408.2         |
| P 272 P  | A   | A   | A   | A   | A 6 | 133                 | 9.539392014       | 221.6666667             | 100.4506512           | 177.3333333    |
| A 196 P  | A   | A   | A   | A   | A 6 | 551                 | 175.8379936       | 458.3333333             | 254.4097744           | 504.6666667    |
| P 441 P  | A   | A   | A   | A   | A 6 | 725.5               | 78.48885271       | 414.5                   | 150.529067            | 518.1666667    |
| P 368 P  | A   | A   | A   | A   | A 6 | 715                 | 845.6997103       | 433.5                   | 47.0496192            | 527.3333333    |

Figure 4L

| 14       | 15  | 16  | 17  | 18  | 19                  | 20                | 21                      | 22                    | 23             |             |
|----------|-----|-----|-----|-----|---------------------|-------------------|-------------------------|-----------------------|----------------|-------------|
| U4       | UC1 | UC2 | UC3 | UC4 | Average Lower Colon | stdev Lower Colon | Average Small Intestine | stdev Small Intestine | Average Polyps |             |
|          |     |     |     |     |                     |                   |                         |                       |                |             |
| P 519 P  | A   | A   | A   | A   | 6                   | 760.5             | 92.63098834             | 741                   | 220.5190846    | 747.5       |
|          |     |     |     |     |                     |                   |                         |                       |                |             |
| P 373 P  | A   | A   | A   | A   | 6                   | 1070              | 644.8813844             | 753                   | 368.3150825    | 858.6666667 |
|          |     |     |     |     |                     |                   |                         |                       |                |             |
| P 567 P  | A   | A   | A   | A   | 6                   | 1483              | 472.8435259             | 680.3333333           | 105.9874206    | 1081.666667 |
|          |     |     |     |     |                     |                   |                         |                       |                |             |
| P 1400 P | A   | A   | A   | A   | 6                   | 1658.666667       | 532.3244625             | 1183.666667           | 209.8340614    | 1421.166667 |
|          |     |     |     |     |                     |                   |                         |                       |                |             |
| A 1301 P | A   | A   | A   | A   | 6                   | 2394.666667       | 523.1102497             | 1965.333333           | 683.7648231    | 2180        |
|          |     |     |     |     |                     |                   |                         |                       |                |             |
| A 847 P  | A   | A   | A   | A   | 6                   | 3473              | 813.9428727             | 1345                  | 1014.261801    | 2409        |
|          |     |     |     |     |                     |                   |                         |                       |                |             |
| P 2775 P | A   | A   | A   | A   | 6                   | 3706              | 1114.400287             | 2582.5                | 288.1301789    | 2957        |

## Figure 1 M



| 14       | 15  | 16  | 17  | 18  | 19                  | 20                | 21                      | 22                    | 23             |
|----------|-----|-----|-----|-----|---------------------|-------------------|-------------------------|-----------------------|----------------|
| UC1      | UC2 | UC3 | UC4 |     | Average Lower Colon | stdev Lower Colon | Average Small Intestine | stdev Small Intestine | Average Polyps |
| P 202 P  | A   | A   | A   | A 7 | 250.6666667         | 66.3651515        | 276.5                   | 77.71100308           | 265.4285714    |
| P 310 P  | A   | A   | A   | A 7 | 343                 | 87.70784838       | 276                     | 77.78817391           | 314.2857143    |
| P 586 P  | A   | A   | A   | A 7 | 1213.75             | 266.642551        | 606.6666667             | 277.5776168           | 953.5714286    |
| P 632 P  | A   | A   | A   | A 7 | 1229                | 328.8267021       | 927                     | 745.4828413           | 1056.428571    |
| P 275 P  | A   | A   | A   | A 8 | 370.5               | 95.47600047       | 307.25                  | 72.49080401           | 338.875        |
| P 363 P  | A   | A   | A   | A 8 | 586.5               | 438.9605145       | 351.75                  | 149.0936507           | 469.125        |
| P 1858 P | A   | A   | A   | A 8 | 3020                | 750.392786        | 2223.25                 | 438.7720555           | 2621.625       |

Figure 1N

| 24              | 25                    | 26                  | 27  |
|-----------------|-----------------------|---------------------|---|
| sidev<br>polyps | Average Normal Tissue | stdev Normal Tissue | Description   |
|                 |                       |                     |   |
|                 | 720.75                | 281.1729895         | Similar to Rat Opioid growth factor receptor, which regulates cellular renewal, wound healing. OGF inhibits pancreatic and squamous cell carcinomas.  |
|                 |                       |                     |   |
|                 | 664.6                 | 227.5902019         |   |
|                 | 745.8                 | 297.6771741         | insulin-like growth factor binding protein 1,high affinity,expressed in liver, decidua,kidney and in amniotic fluid,regulator of apoptosis  |
|                 |                       |                     | caspase 7,effector,cysteine containing aspartate-specific protease,CASP3 subfamily,stored in the mitochondrial intermembrane space and released into cytosol after appropriate apoptotic stimuli,promoting apoptosis,H3,isoform alpha,interacting with calpain during B cell clonal deletion by apoptosis |
|                 | 1265.833333           | 545.7473469         | Purkinje cell protein 4,rat PEP-19,neuron-specific polypeptide homolog  |
|                 | 484.4285714           | 172.9921551         | gene,with homology to S100 calcium binding proteins,involved in the development of the central nervous system   |
|                 |                       |                     |   |
|                 | 673                   | 202.704218          |   |
|                 | 3324.714286           | 2358.930952         |   |
|                 |                       |                     |   |

Figure 1 O

24 25 26 27

| stdev<br>polyps | Average Normal Tissue | stdev Normal Tissue | Description  |
|-----------------|-----------------------|---------------------|--|
| 50.849451       |                       |                     |  |
| 93.196924       |                       |                     | eukariotic translation initiation factor 2B, subunit 5, ubiquitously expressed (epsilon, 82kDa)  |
| 91.507741       |                       |                     |  |
| 194.36306       |                       |                     | phosphorylase, glycogen catabolism, brain  |
| 102.36332       |                       |                     | tumor necrosis receptor-associated factor ,TRAF-interacting protein, mediator of NFKB activation after induction by TRAF2, apoptosis inhibitor?                          |
| 155.79768       |                       |                     |  |
| 190.76163       |                       |                     | prohibitin (antiproliferative protein) potential tumor suppressor regulating E2F1 function   |
| 408.72515       |                       |                     |  |
| 197.45548       |                       |                     | cyclin dependent kinase 4 and 6 (CDK4/CDK6) inhibitor, p19, regulator of the cell cycle, passage through the G1 checkpoint, expressed primarily in hematopoietic tissues |
| 626.21582       |                       |                     |  |

Figure 1P

26 27

24 25

26

25

24

| stdev<br>polyps | Average Normal Tissue | stdev Normal Tissue | Description  |
|-----------------|-----------------------|---------------------|--|
| 606.35331       |                       |                     |  |
| 219.1879        |                       |                     |  |
| 796.45271       |                       |                     |  |
| 1483.5728       |                       |                     | myosin IC, unconventional, apparently non filamentous, homologous to mouse<br>Myo1e, crypt cell marker |
| 60.213786       |                       |                     |  |
| 82.118816       |                       |                     |  |
| 90.071083       |                       |                     |  |

Figure 1 Q

| 24<br>stdev<br>polyps | 25<br>Average Normal Tissue | 26<br>stdev Normal Tissue | 27<br>Description   |
|-----------------------|-----------------------------|---------------------------|---|
| 189.69502             |                             |                           | carboxypeptidase E, metallo carboxypeptidase family, regulated secretory pathway sorting receptor, involved in the trimming of paired basic residues at the C terminus of prohormone-derived peptides, mutated in the obese fat mouse |
| 173.52723             |                             |                           | CDC-like kinase 3, with two alternatively spliced forms, one catalytically active and one inactive isoforms, interacting with and inducing the nuclear redistribution of SR proteins SFRS* (see symbols), widely expressed            |
| 254.64426             |                             |                           |   |
| 312.06201             |                             |                           |   |
| 272.00974             |                             |                           |   |
| 342.67959             |                             |                           |   |
| 549.28818             |                             |                           | laminin 5 (kallinin/nicein), beta 3 polypeptide, component of cutaneous basement membrane zone, expressed in stratifying squamous epithelium, downstream from E-cadherin  |
| 619.67306             |                             |                           |   |
| 918.01934             |                             |                           | chymase, mast cell, with a variant putatively involved in eczema  |

**Figure 1R**



| 24              | 25                    | 26                  | 27   |
|-----------------|-----------------------|---------------------|--|
| stdev<br>polyps | Average Normal Tissue | stdev Normal Tissue | Description  |
|                 |                       |                     | Inhibits Ras-induced malignant phenotypes in fibroblasts ??<br><a href="http://www.kfinder.com/member-search/getdoc.cgi?ord=5&amp;searchid=1&amp;have_local_holdings_file=1&amp;local_journals_only=0">http://www.kfinder.com/member-search/getdoc.cgi?ord=5&amp;searchid=1&amp;have_local_holdings_file=1&amp;local_journals_only=0</a> |
| 739.61733       |                       |                     |  |
| 871.29369       |                       |                     |  |
| 2192.8791       |                       |                     |  |
| 80.193932       |                       |                     |  |
| 202.07292       |                       |                     | cytochrome p450, family 1 (aromatic compound inducible), member B1, expressed in ocular structures of the anterior uveal tract, possibly involved in the metabolism of substances active in the eye growth and differentiation   |
| 201.54346       |                       |                     | calpain, large polypeptide L1, calcium dependent neutral cysteine proteinase, papain superfamily, mu type (not mutated in MEN1)  |
| 406.81822       |                       |                     |  |

Figure 1S

| 24              | 25                    | 26                  | 27   |
|-----------------|-----------------------|---------------------|--|
| stdev<br>polyps | Average Normal Tissue | stdev Normal Tissue | Description  |
| 176.05312       |                       |                     | In different types of epithelial tumours, cadherin expression is inversely correlated with invasiveness and metastatic dissemination   |
| 437.45293       |                       |                     | hGAR1 is a component of H/ACA snoRNPs and telomerase in vivo   |
| 535.91778       |                       |                     | Mus musculus cleavage and polyadenylation specificity factor 73 kDa subunit mRNA   |
| 445.69874       |                       |                     | thymidine kinase 1, pyrimidine salvage pathway, soluble, putative up-regulated c-Myc target gene.  |
| 593.10168       |                       |                     | nucleolin, major multifunctional nucleolar protein of exponentially growing cells, characterized by unique tripartite function within each domain, performing activities i.e. a specific DNA helicase and DNA-dependent ATPase, also acting as a sequence-specific RNA binding protein an autoantigen, a component of B cell specific transcription factor, involved in ribosome biogenesis, cytokinesis, nucleogenesis, cell proliferation and growth, chromatin remodeling etc.. |
| 1426.5368       |                       |                     | inhibits gtp exchange on ran. forms a ran-gtp-ranbp1 trimeric complex. increase gtp hydrolysis induced by the ran gtpase activating protein rangap1. may act in an intracellular signaling pathway which may control the progression through the cell cycle by regulating the transport of protein and nucleic acids across the nuclear membrane.  |
| 796.73684       |                       |                     | guanine nucleotide-binding proteins (g proteins) are involved as a modulator or transducer in various transmembrane signaling systems. the beta and gamma chains are required for the gtpase activity, for replacement of gdp by gtp, and for g protein- effector interaction.   |

Figure 1 T

| 24              | 25                    | 26                  | 27   |
|-----------------|-----------------------|---------------------|--|
| stdev<br>polyps | Average Normal Tissue | stdev Normal Tissue | Description  |
| 68.397995       |                       |                     | ubiquitin conjugating enzyme E2 variant 1, expressed as at least four isoforms, transcriptional activator of FOS promoter, underexpressed in hormone refractory prostate cancer, potentially involved in the control of differentiation and the entry of a larger proportion of cells in the division cycle and an accumulation in G2-M  |
| 84.533454       |                       |                     |  |
| 408.08367       |                       |                     |  |
| 583.072         |                       |                     | collagen type I, alpha 1, fibril forming, putative downregulated c-Myc target gene.  |
| 85.4508         |                       |                     | <a href="http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&amp;db=PubMed&amp;list_uids=10769639&amp;dopt=Abstract">http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&amp;db=PubMed&amp;list_uids=10769639&amp;dopt=Abstract</a> Increased expression of heparin binding EGF (HB-EGF), amphiregulin, TGF alpha and epiregulin in androgen-independent prostate cancer cell lines. |
| 328.4076        |                       |                     | PRG1: a novel early-response gene transcriptionally induced by pituitary adenylate cyclase activating polypeptide in a pancreatic carcinoma cell line.   |
| 710.77944       |                       |                     |  |

Figure 1U

FIGURE 1V

FIGURE 1V

|    |    |    |
|----|----|----|
| 1A | 1H | 1O |
| 1B | 1I | 1P |
| 1C | 1J | 1Q |
| 1D | 1K | 1R |
| 1E | 1L | 1S |
| 1F | 1M | 1T |
| 1G | 1N | 1U |